

Appl. No. 10/659,661
Amndt. dated November 30, 2005
Reply to Office Action of August 30, 2005

Remarks

The present amendment responds to the Official Action dated August 30, 2005. That action rejected claims 1-12 under 35 U.S.C. 103(a) based on Dalton et al. U.S. Patent No. 6,419,154 (Dalton) in view of Matsushita U.S. Patent No. 6,762,674 (Matsushita). The sole ground of rejection is addressed below following a brief discussion of the present invention to provide context. Claims 1, 2 and 8-12 have been amended to be more clear and distinct. New claims 13-16, dependent directly or indirectly from claim 10 have been added. Claims 1-16 are presently pending.

The Present Invention

The present invention is entitled "Dual-Communication Electronic Shelf Label System and Method". As discussed in the Background, the present inventors recognized that "ESL systems have bandwidth limitations that could be exceeded as retailers discover the benefits of real-time price optimization," and that "ESL systems also compete with other systems for bandwidth." Page 1, lines 16-19. To address such issues, the present invention provides systems and methods for dual communication with duplex or concurrent transmission and reception utilizing a plurality of ESLs that operate in different modes. See page 1, line 28-page 2, line 8, and page 3, line 25-page 4, line 6, for example.

Examples of different modes are the use of different bands, different parts of bands of different communication types. For example, downlink communication may be at 2.4 GHz and uplink at 400 MHz. The downlink may be wireless RF while the uplink is wireless infrared. The

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downlink may be wireless RF while the uplink utilizes-inductive coupling. See page 3, line 25-page 4, line 6.

Utilizing the approach, the air time can be maximized by facilitating communication over both the downlink and uplink channels simultaneously. See page 4, lines 9-16. As noted there, full-duplex communication effectively doubles the communication bandwidth of the system.

The Art Rejections

As addressed in greater detail below, Dalton and Matsushita do not support the Official Action's reading of them and the rejections based thereupon should be reconsidered and withdrawn in light of the present amendment. Further, the Applicant does not acquiesce in the analysis of Dalton and Matsushita made by the Official Action and respectfully traverses the Official Action's analysis underlying its rejections.

Dalton is assigned to the assignee of the present invention and represents one example of the admitted state of the art briefly discussed in the Background of the present invention. While Dalton recognized that downlink and uplink technologies may be different at col. 1, lines 29-38, as noted by the Examiner and as further discussed at col. 3, lines 3-16, it specifically addresses an arrangement in which a relay unit includes a single transmitter connected to multiple transmit antennae to provide improved RF transmission while maintaining lower costs. Col. 1, lines 53-56. Dalton does not teach and does not make obvious duplex or concurrent communication between a base station and a plurality of ESLs utilizing two different communication modes as

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presently claimed. It does not appear to recognize the problem of insufficient bandwidth, nor does it suggest a solution thereto.

Matsushita appears to be incapable of the presently claimed operation as its ESLs do not communicate directly with the base station, but rather communicate indirectly through intermediate relays as discussed further below. The Official Action specifically relies upon col. 5, lines 16-67 of Matsushita. This text describes the communication of base station 16 with an ESL at 2.4 GHz, as well as, communication by the ESL with a radio relay station at 300 MHz. Matsushita's Fig. 5 shows details of his relay stations 13-1 to 13-k. His relay station includes a single 2.4 GHz transmission section 137 which transmits ID information for an ESL transmitting a negative response to the base station. Col. 5, line 61-col. 6, line 19. Similarly, details of Matsushita's base station 16 are shown in Fig. 3. That base station has a single 2.4 GHz transmission section 164 and a single 2.4 GHz reception section 165. Col. 4, lines 63-67. To sum up, Matsushita lacks the circuitry to support duplex communication between a base station and plural ESLs utilizing two modes of communicating as presently claimed. All of the wireless communication by the Matsushita base station appears to utilize the single 2.4 GHz mode, and there appears to be no basis to understand Matsushita as addressing duplex or concurrent transmission and reception by the base station.

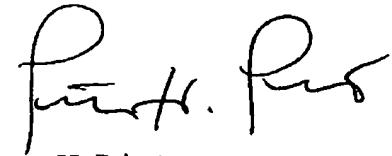
As such, Dalton does not anticipate and does not make obvious the present claims.
Matsushita provides no basis for modifying Dalton to meet the terms of these claims.

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Conclusion

All of the presently pending claims, as amended, appearing to define over the applied references, withdrawal of the present rejection and prompt allowance are requested.

Respectfully submitted,



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